

**CTLA4-IMMUNOGLOBULIN FUSION PROTEINS HAVING MODIFIED
EFFECTOR FUNCTIONS AND USES THEREFOR**

5

Abstract

CTLA4-immunoglobulin fusion proteins having modified immunoglobulin constant
region-mediated effector functions, and nucleic acids encoding the fusion proteins, are
described. The CTLA4-immunoglobulin fusion proteins comprise two components: a first
10 peptide having a CTLA4 activity and a second peptide comprising an immunoglobulin
constant region which is modified to reduce at least one constant region-mediated biological
effector function relative to a CTLA4-IgG1 fusion protein. The nucleic acids of the invention
can be integrated into various expression vectors, which in turn can direct the synthesis of the
corresponding proteins in a variety of hosts, particularly eukaryotic cells. The CTLA4-
15 immunoglobulin fusion proteins described herein can be administered to a subject to inhibit
an interaction between a CTLA4 ligand (e.g., B7-1 and/or B7-2) on an antigen presenting cell
and a receptor for the CTLA4 ligand (e.g., CD28 and/or CTLA4) on the surface of T cells to
thereby suppress an immune response in the subject, for example to inhibit transplantation
rejection, graft versus host disease or autoimmune responses.

20

10027075-122001